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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/741,170 | 12/21/2000 | Sang On Park | 0465-0791P | 6704 |
| 2292 | 7590 | 06/18/2004 | EXAMINER | |
| BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | PSITOS, ARISTOTELIS M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2653 | |

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/741,170

Applicant(s)

PARK, SANG ON

Examiner

Aristotelis M Psitos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) all is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/3/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Applicant's response of 3/24/04 has been considered with the following results.

Drawings

With respect to applicant's request of a draftsman letter of approval for the drawings, such a procedure is no longer entertained. The examiner has reviewed the figures and finds them acceptable,

especially in response to the correction submitted on 7/23/02 which ~~was~~ should have been formally submitted and approved
Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 1-4, 7, 10, 13, 15, 16, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al further considered with Mizumoto et al.

With respect to the independent claims, Kuroda et al discloses a spindle speed control system using the separated wobble signal read from an optical disc. There is no specific mentioning that the speed control is performed in a free running state, i.e., as claimed – only with focus ability.

Mizumoto et al discloses in this environment the ability of performing/control the spindle motor speed during such a period of operation.

It would have been obvious to modify the base system of Kuroda et al with the above teaching from Mizumoto et al, motivation is to obtain a stable spindle speed prior to energizing any of the

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subsequent servo systems – i.e., get the disc up to speed as well as permitting the disc to operate stably and hence permit subsequent signal recording abilities as discussed in Mizumoto et al.

With respect to claims 2,3,10,15, 16 and 20, these are considered present in the primary references, i.e., the wobble signal itself as well as the pll limitation.

With respect to claims 4 and 17, it is noted that Mizumoto et al also teaches the ability of performing this speed control for a variety of zones/specific areas across the disc, and not during others. The examiner interprets such as meeting the limitations of claims 4 and 17 (duplicate limitations) wherein the “inhibiting” ability is when the system is during those periods that no speed control is being performed.

Response to Arguments

Applicant's arguments filed 3/24/04 have been fully considered but they are not persuasive.

Applicant focuses on what the secondary reference lacks. This is not what it was relied upon for, but rather as indicated above for the ability of having the focus servo on prior to the tracking. The examiner has concluded that such is a teaching of having the focus servo on prior to any tracking servo – see further illustration of such as noted in col. 2 lines 60 plus of Matsumoto et al (5,511,050) and hence is a teaching of focus servo on prior to tracking servo in this environment. The wobble track ability has been noted in the primary reference to Kuroda et al. The examiner has given appropriate rational for combining the teachings/disclosures of the above noted references.

Additionally, applicant's attention is drawn to Tomita – see figure 18. In any event, the examiner maintains the grounds of rejection.

4. Claims 5,6,11,12,18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1, 7 and 13 above, and further in view of Buchler.

The ability of detecting the wobble signal by use of optical detectors is standard and as further depicted by Buchler see col. 8 line 24 to col. In Buchler however the tzc control is performed in the te servo section.

It would have been obvious to modify the base system of the references relied above with the ability of using such window comparison and tzc for detecting the boundary of the track for the speed

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control because placement of the optical light spot upon the track is necessary to ensure detection of the wobble track and comparison thereof, use with the te servo components permit for better signal reproduction as taught by Buchler.

5. Claims 9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1, 7 and 13 above, and further in view of either themselves or IImura.

Kuroda et al merely designates a wobble signal detector with no particular. The examiner concludes that such elements contain the claimed limitations of claims 9 and 14 as further depicted by IImura. Either the reference to Kuroda et al inherently possesses such limitations, or alternatively such limitations are well known for performing such abilities as taught by IImura.

It would have been obvious to modify the base system of Kuroda et al with the use of such standard elements for the wobble signal separator/detector, motivation is to use standard equipment and save valuable resources.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Horikiri and Ogawa are cited as illustrative of speed control using wobble signals and could be relied upon in place of Kuroda et al. Takata et al and Suzuki are cited as tzc and widow circuitry in this environment for their ability to detect the boundaries of optical tracks. Osada teaches the focusing ability subsequent to spindle lock ability and subsequently followed by the te ability.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Hard copies of the application files are now separated from this examining corps; hence the examiner can answer no questions that require a review of the file without sufficient lead-time.

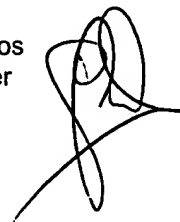
Any inquiries concerning missing papers/references, etc. must be directed to Group 2600 Customer Services at (703) 306-0377.

Any inquiry concerning the merits of this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aristotelis M Psitos
Primary Examiner
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AMP